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Dr. Dickson
with the Author's Respect.
A SCHEME

OF A

COURSE OF THIRTY LECTURES

INTRODUCTORY TO THE

STUDY OF MEDICINE;

INTENDED FOR THOSE WHO HAVE RECENTLY ENTERED, OR WHO
ARE ABOUT TO ENTER,

The Medical Profession.

By J. W. K. PARKINSON,

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“Vita brevis, ars longa, occasio præceps, experientia fallax, judicium difficile.”
Hipp. Aphor. 1.

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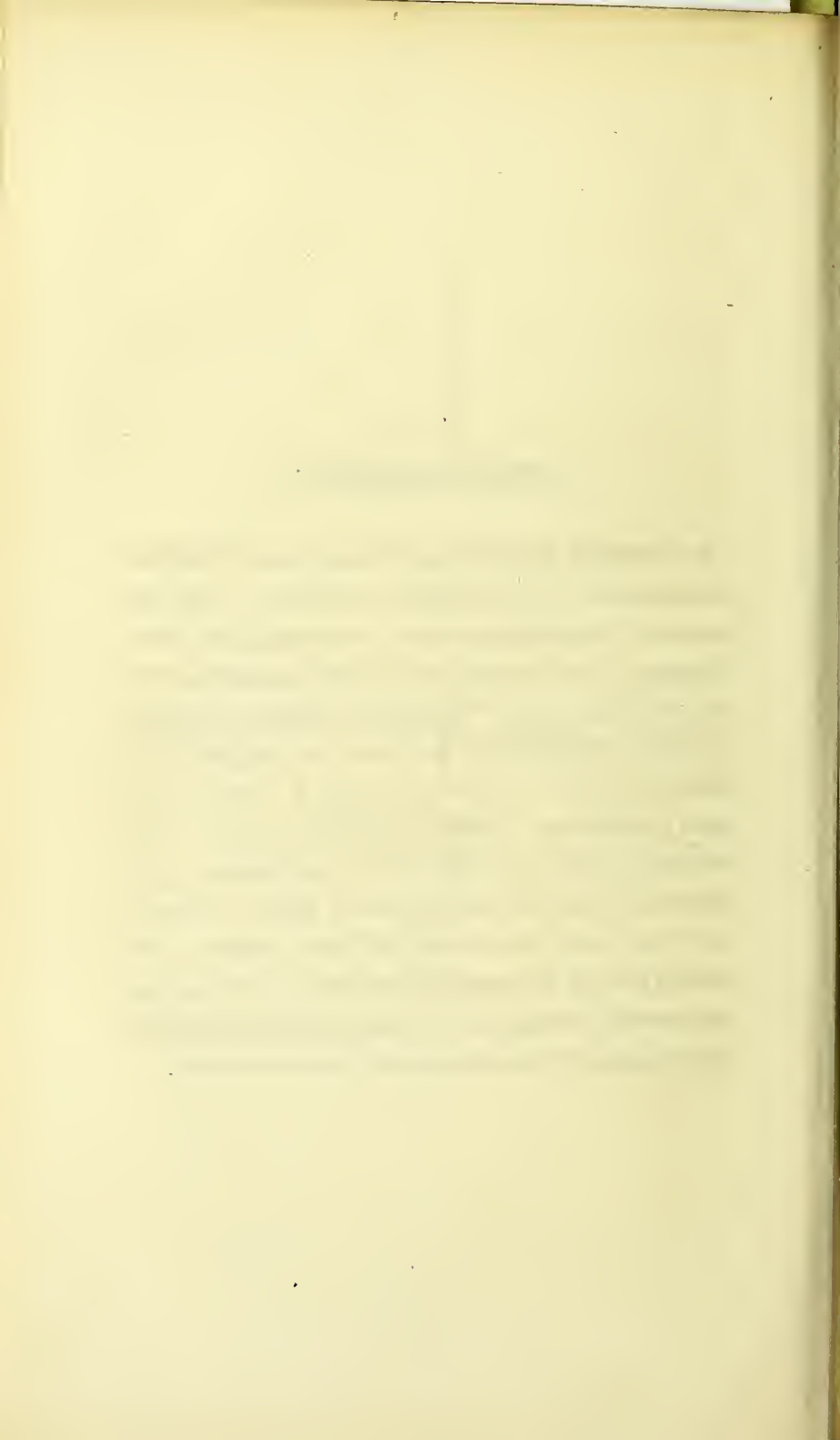
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ADVERTISEMENT.

In publishing the following Scheme, before the direct announcement of the Lectures of which it forms the framework, the Author has been actuated by the desire (the plan being a novel one) of first submitting it to those Members of the Profession who have greater opportunities afforded them than himself of judging of the advantages likely to accrue from such a course of preliminary instruction. Should its utility, however, not be conceded to him, he trusts that the publication of the Scheme will not be considered wholly useless; inasmuch as it may assist the present and future studies of the medical student, by presenting him with a bird's-eye view and orderly arrangement of those subjects on which he will be expected to possess more or less information.



PREFACE.

NOTWITHSTANDING the present improved state of the system of medical education, intended to qualify the student for the due performance of the important duties of a general practitioner, and the determinate and respectable rank in the profession it affords to those who submit themselves to the required tests of their acquirements in the two departments of medicine ; yet it is much to be feared, that, in many cases, the time usually allotted to the acquisition of the necessary knowledge on the multiplicity of subjects now embraced by the present system of medical education, is not disposed of to the best advantage. This may be partly attributable to the student, previously to his entering upon his medical studies, not having been duly trained in the habits of mental application and correct reasoning, and partly to the want of a connected plan, upon a sufficiently extensive scale, of all the subjects on which he is required to obtain information ; such *a plan* as would point out to him the mutual bearings and dependencies of all the subjects, and give him

such a degree of acquaintance with each as would enable him to form a comparative estimate of their value to the main object of his pursuit.

To the above circumstances, together with a want of sufficient moral courage to place restraint upon his inclinations, may be attributed the disposition often manifested by the medical student of leaving the way of slow and toilsome observation (the only path to sound and useful knowledge, and which entitle us to claim it as our own) to follow that which, though more direct and easy, supplies him with attainments of a very superficial and flitting character, and which allow too much time to be passed in scenes more congenial to his tastes and habits than those presented by the dissecting-room, the laboratory, and the wards of an hospital.

Again ; the medical student cannot be too strongly or too early impressed with the conviction, that there is no profession which calls more for the cultivation and development, to the full extent of their capacities, of all the faculties with which both the mind and body are endowed, than that of Medicine ; and that there is none which requires a more enlarged acquaintance with natural objects and phenomena, and of the precise and immutable laws by which they are governed : but, above all, a youth

intended for the medical profession ought to be well apprised of the necessity of early acquiring habits of moral rectitude and self-control, that he may be prepared to feel and to act towards his fellow-creatures and his God as becomes a man and a good christian, entrusted with duties for the faithful and diligent discharge of which he must be considered in a high degree responsible.

The objects, then, of these Lectures, of which the following pages present a scheme, are:—First, to recall to the mind of the medical student such points of his preliminary education as will be most conducive to the advancement of his future inquiries, and to the upholding the dignity and usefulness of his profession.—Secondly, to point out to him the methods by which the physical sciences have arrived at their present height, and by which they are still farther to be advanced; to present him also with a general description of natural objects, and the phenomena they present under the influence of the subtle agents of nature.—Thirdly, to supply him with such a general description of the structure and functions of the human body, both in health and disease, and of the means employed for the restoration of health, as may enable him to direct his steps with more certainty and precision in the intricate path which

leads to the attainment of more minute information on such important points.—Lastly, to furnish him with precise directions as to the mode of performing the lesser operations of surgery, and as to the immediate treatment to be adopted in cases of emergency to which he may be called, before he can be supposed to have acquired a knowledge of the principles of his profession.

Whenever the subjects treated of will admit of such illustrations, experiments, specimens, and diagrams, will be had recourse to.

Although these Lectures are chiefly intended for the novitiate in medicine, yet it is not meant to exclude those who, from a laudable curiosity, may be desirous of obtaining general information on the topics to be discoursed on.

SCHEME, &c.

FIRST DIVISION.

INTRODUCTORY remarks—Knowledge—instinctive—acquired—Human knowledge—whence acquired—degrees or kinds of—great diversity and extent of—various motives which actuate individuals in the pursuit of—chief motives by which we ought to be actuated—Different methods by which knowledge is usually acquired——Education—physical—mental—object of each threefold—Influence of physical education on the due exercise of the intellectual and moral faculties—The physical and mental training required by those intended for the medical profession——Genius—term often misapplied—sense in which it ought to be received—how best directed in the acquisition of medical knowledge——Advantages and disadvantages of the present system of medical education—removal of the latter shewn to rest chiefly with the student himself—Circumstances which demand the student's special atten-

tion, and by which his acquirements will be best appreciated, both by his well-informed medical brethren and the public.

Speech, or the discoursing faculty—conventional forms of—logical principles of their construction—Ancient and modern languages—acquaintance with of great importance to the medical student—Language of science—principles of its construction.

Taste for the beauties of nature and art, and that for polite literature—beneficial influence of their cultivation and refinement on morals, social intercourse, &c., circumstances which peculiarly call for their cultivation by the medical student.

Composition—style of, chiefly to be studied by the medical student—best mode of acquiring it.

Knowledge of human nature—on what account valuable to the medical practitioner—how best obtained.

SECOND DIVISION.

Science—comprehensive meaning of the term—sense in which it is ordinarily employed—definition of, by Sir John Herschel—Circumstances on which the certainty of science rests—The science which possesses the combination of these in the highest degree, compared with that which stands in the lowest degree of the scale, in this respect—The rank

which medicine holds in relation to the two—Division of science into *mathematical*, *mental*, and *physical*—Beneficial influence of scientific pursuits on the mind independent of their useful application to the purposes of life.

Mathematical science or doctrine of quantity in relation to *space*, *time*, *number*, *order*, and *proportion*—abstract nature of—application of to physical science.

Mental science, or intellectual and moral philosophy—Intellectual, social, and moral faculties, and those of a still more exalted order—rules for their cultivation and development, and for the regulation of reason in the inquiry after truth.

Physical science, or natural and experimental philosophy—divided into *mechanical philosophy*, *chemical philosophy*, and philosophy of living beings, or *physiology*.

Philosophical inquiries and revealed truth compared—each shewn to rest, independently of the other, on its own basis, but found to be in perfect harmony when their legitimate objects are duly considered and appreciated.

Modes of prosecuting philosophical inquiries—*Inductive* or *analytical method*—*Deductive* or *synthetical method*—Meaning attached to the terms *theory* and *hypothesis*.

Matter or substance—mechanical properties of, divided into *general* and *secondary*—these severally described.

Bodies considered as consisting of integral atoms

incapable of further mechanical division—Bodies divided, according to the degree of cohesion of these atoms, into *solids*, *inelastic fluids* or *liquids*, and *elastic fluids*. Forces which they each exert when in a state of rest and in motion, expressed by the general term *dynamics*—when in relation to solids only, *statics* and *mechanics*—to liquids, *hydrostatics* and *hydraulics*—to elastic fluids, *pneumatics*: these severally considered.

Application of the laws of gravitation and of motion to explain the whole mechanism of the universe, and to the artificial construction of mechanical powers—Precise degree of mathematical expression the dynamical forces of bodies are capable of, pointed out.

Facts and theories respecting the imponderable agents of nature, *light*, *heat*, and *electricity*—Degree of mathematical expression they admit of—Hypotheses relating to their essence—Universal influence they exert both on inanimate and animate bodies—Means by which their effects are measured.

Elementary constituents of bodies—Laws of combination of the elementary particles of bodies, or doctrine of definite proportions—Phenomena produced by the action of the elementary particles upon each other.

Compound substances—their classification according to the nature and number of constituent elements—Permanency of inorganic compared with that of organic compounds—Results of the spontaneous decomposition of the latter.

Relation in which chemical philosophy stands in regard to the science of quantity considered.

Vital properties peculiar to some bodies—signs by which they manifest themselves in two forms of beings; viz., *vegetable* and *animal*—Laws by which they are regulated—Question considered, whether vital properties are essentially seated in the solid parts of vegetables and animals, or in their nutritive fluids.

Brief consideration of the opposition which vital phenomena offer to, and the aid which they occasionally derive from, the laws of dynamics and chemistry.

Natural history—modes by which its objects are investigated—Sciences which aid its investigations—Study of, recommended, as combining mental exercise with recreation, independently of its connexion with medicine.

Division of natural objects into three kingdoms, or into organic and inorganic beings—Characters distinguishing these—Notion of an uninterrupted chain of natural bodies shewn to be imaginary and not well founded—How far an approach to it may be admitted.

Substances entering into the composition of the solid crust of the globe, termed minerals—Determinate forms they exhibit under certain favourable circumstances—Principles on which they have been systematically arranged.

Atmospheric air—properties of—various impregnations of, on the surface of the earth.

Water—properties of, when pure—adventitious

properties of, derived from mineral impregnations ; these systematically arranged.

Structure of beings possessing living properties.

Elementary tissues entering into the structure of plants—Compound organs of plants—divided into vegetative and reproductive—various modifications presented by each—Reproductive organs shewn to be formed upon one typical model, derived from the leaf, of which they may therefore be considered as modifications—Fluids of plants.

Plants considered as living beings, performing the functions of vegetation and reproduction—Spiral evolution observable in the different organs of plants, and the numerical and geometrical relations they bear to each other.

General view of the vegetable kingdom.

Principles upon which the classification of plants has been founded.

Proximate principles educed from plants—Spontaneous products of, during life, and those resulting from decomposition after death—Properties of each, and the uses to which they have been applied, particularly in regard to the economy of man.

Elementary tissues of animals—those pointed out which are essential to animal existence, and those which are of secondary importance—Organs of animals—divided into those of *relation*, of *nutrition*, and of *reproduction*—Various modifications presented by each class in the different tribes of animals, fitting them to the particular circumstances of their existence.

Fluids of animals.

Animals considered as living beings, performing the functions with which their respective organs are endowed—Sensibility and contractility explained.

Laws of the progressive development of organs throughout the whole animal kingdom shewn to be simple and uniform—these compared and identified with those which regulate the progressive changes in the human foetus from its primordial state to that of its highest perfection.

High importance of comparative anatomy to the medical student, as conveying to him enlarged views of the animal economy, and occasionally relieving him from the dry detail of human anatomy, to which his attention must necessarily be much directed.

General view of the various forms and habits of animals—Characters upon which animals have been systematically arranged—Importance of animals to the economy of man.

Structure of the surface of the earth—proportion between land and water—Composition, character, relative position and bearings of the different masses termed rocks, which present themselves above the level of the ocean—Comparative heights of some of the principal of these—Influence of height on temperature—difference in this respect between the old and new continents, and between the temperate and torrid zones—Mineralized remains of organic bodies—these compared with the genera and species of animals and vegetables now in ex-

istence—their importance pointed out, as marking the relative ages of the rocks in which they are found embedded—Changes which are now taking place upon the surface of the earth—these compared with those which appear to have been in operation, upon a much larger scale, at some remote period or periods.

Atmospherical changes — difficulties attending their investigation—means by which they are predicted and measured.

Difference between artificial and natural climates—the constituents of the latter divided into primary and secondary.

Geographical and local distribution of animals and plants shewn to depend on well-defined laws.

Natural history of man—Characters distinguishing man from those animals most nearly resembling him—Races or varieties of the human species.

THIRD DIVISION.

Particular description of the elementary tissues, by the combination of which the different organs of the human body are formed—Degree and kind of vitality which they each impart to the organs thus formed—Fluids of the human body—division of, into those of composition and of decomposition—particular description of each.

General description of the organs of the human

body ; 1st, Organs of *relation* or of *animal life* ; 2dly, Organs of *nutrition* or of *vegetative life* ; 3dly, Organs of *generation*.—Peculiarities in the organization of the fœtal state of existence.

Mechanism of the human frame.

Position of the different parts of the body in relation to each other as contained in certain artificial divisions termed regions—most important of these pointed out.

Human body considered as endowed with life—Sensibility and contractility more particularly described as the essential elements of vitality—Classification of the functions of the human body—Description of each class of functions, and the aid which they occasionally derive from the laws of dynamics and chemistry pointed out—Natural sympathies existing between the various organs—Influence of custom and habit on certain periodical movements of the system.

Constitution—vague meaning of the term as commonly received—what ought to be understood by it—Peculiarities of constitution compatible with health, arising from age, sex, temperament, diathesis, idiosyncrasy, and habits of life—Changes which the constitution undergoes at certain periods of life—Vis medicatrix naturæ—implicit reliance upon, or total disbelief in, shewn to be equally erroneous—Health—just and extended use of the term—common and limited sense in which it is usually employed.

FOURTH DIVISION.

Disease—general doctrine of, considered under, causes, symptoms, diagnosis, prognosis, translation, conversion, division, and classification of diseases—Morbid sympathies existing between organs—Changes produced by disease on the blood and secreted fluids, and in the various tissues of the solids—Art of observing disease—mode in which it is best cultivated.

Treatment of disease—Various modes by which remedies have been discovered—Vague and ridiculous principles upon which many articles still in use were first employed—Injurious effects of the belief in the specific nature of diseases as giving rise to a vain search after specific remedies—Examination of those which are generally allowed to have a specific action—Division of remedial agents into dietetical, pharmaceutical, and manual or surgical—Distribution of pharmaceutical agents into classes corresponding with the principal indications of cure, or the purposes which they are more especially calculated to fulfil—Modes of investigating and appreciating the power and medical virtues of remedies—Circumstances necessary to the true knowledge and successful treatment of disease.

Absurdity of attempting to treat diseases on any invariable system—illustrated by the examination of the principles of the Brunonian and Homœopathic systems.

Substances derived from the three kingdoms of nature employed in the treatment of disease—processes by which they are modified and compounded with a view to their more efficient and convenient administration.

Influence of climate on disease, and that of locality of station and of atmospheric vicissitudes.

General remarks on surgical and obstetrical operations, and on the application of the mechanical powers to the human frame.

FIFTH DIVISION.

Particular description of the minor operations of surgery not requiring much anatomical knowledge or skill, and the necessity for which is of frequent occurrence.

The immediate treatment to be adopted in cases of external injuries arising either from chemical or mechanical causes.

Signs by which the more serious internal injuries may be suspected to have taken place.

Treatment to be adopted in cases of apparent death, or in those nearly approaching it, arising either from excessive cold, starvation, drowning, strangulation, or from the inhalation of noxious vapours.

Poisons—division of, according to the kingdom of nature from which they are derived, and to their

modes of acting on the system—treatment to be adopted when received into the stomach, or otherwise introduced into the system—mode of detecting those most commonly employed.

Medical jurisprudence or forensic medicine—great importance of to the medical practitioner, both as regards the due administration of justice in criminal cases, and the preservation of the health of the community.

Sketch of the revolutions which have taken place in medicine and its auxiliary sciences from the age of Hippocrates to the present period—Question considered, how far the division of the practice of medicine into physic and surgery ought to be received.

Concluding remarks, on the duties of the medical practitioner, and the qualifications necessary for their due performance.

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Substance of a COURSE of LECTURES on the PRINCIPLES and PRACTICE of SURGERY, delivered by the late Mr. JOHN HUNTER, in the Year 1785: taken in Short-Hand, and afterwards fairly transcribed, by the late Mr. JAMES PARKINSON, Author of "Organic Remains of a Former World," &c. Edited by his Son, J. W. K. PARKINSON, Fellow of the Royal College of Surgeons in London; by whom are appended Illustrative Notes.

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